

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) Form-fill-seal machine for making bag-shaped packagings for products from a web of foil material, the machine comprising:

a frame having a stock of web of foil material and a supply of the web of foil material in flat condition;

a form-fill unit removably connected to the frame at a front side of the machine, said form-fill unit comprises a form shoulder for transforming the flat web of foil material into a foil tube, and a form-fill tube connecting to the form shoulder, having a vertical main plane of section, said form-fill tube extending through the form shoulder in a vertical passage of the form shoulder, a collar surface of the form shoulder slopes with an inclined surface into a narrowing lip, said narrowing lip extends to a short side of said passage;

transverse sealing jaws that are positioned below a lower end of the form-fill tube for forming transverse seals in the foil tube and which are moveable towards and away from each other in a vertical plane perpendicular to a front side of the machine and said vertical main plane of section, the form shoulder being asymmetrically shaped and having a sideward opening to form

a flap in a packaging formed by the form-fill machine, said flap being formed from an overlap in the foil tube which extends from a rear side of the packaging over an upper side of the packaging to a front side of the packaging; and

first longitudinal sealing means that are positioned at a first side, at one lateral side of the form-fill tube, as considered from the front side of the machine, at a short distance from or near said vertical main plane of section, that form a first, severable longitudinal seal to seal the overlap to the front side of the packaging while maintaining said flap.

2. (original) Form-fill-seal machine according to claim 1, furthermore provided with second longitudinal sealing means positioned at a second side, at one lateral side of the form tube, as considered from the front side of the machine, opposite the first side, for forming at least one longitudinal seal in the foil tube.

3. (original) Form-fill-seal machine according to claim 2, wherein two longitudinal sealing means are provided that are positioned at either side of, preferably equidistant from, the vertical plane of section.

4. (original) Form-fill-seal machine according to claim 3, wherein the form-fill unit at the second side is provided with two protruding form strips for forming longitudinal folds in the foil tube, wherein the second longitudinal sealing means are positioned for sealing the longitudinal folds.

5. (original) Form-fill-seal machine according to claim 4, wherein second longitudinal sealing means comprise an anvil/form member, that extends between both longitudinal folds for positioning them for sealing.

6. (previously presented) Form-fill-seal machine according to claim 2, wherein the position of at least one of the first and second longitudinal sealing means is adjustable in a direction towards/away from the fill tube.

7. (original) Form-fill-seal machine according to claim 5, wherein the anvil/form member forms an interchangeable part.

8. (original) Form-fill-seal machine according to claim 1, wherein the form-fill unit is detachably placed in the machine.

9. (original) Form-fill-seal machine according to claim 1, wherein the form/fill tube at the first side at the lower end is provided with a first protrusion, situated in or near the vertical plane of section and extending downwards, and which in horizontal direction is free from the remainder of the lower end of the fill tube.

10. (original) Form-fill-seal machine according to claim 9, wherein the first protrusion is pen- or lip-shaped.

11. (original) Form-fill-seal machine according to claim 9, wherein the first protrusion with its end extends beyond the profile of the fill tube.

12. (original) Form-fill-seal machine according to claim 9, wherein the form/fill tube at its lower end is furthermore

provided with at least a second protrusion, which is at least situated at the second side and defines a recess with the first protrusion.

13. (original) Form-fill-seal machine according to claim 12, wherein the second protrusion forms a sharp guiding edge, particularly substantially oriented towards the bottom.

14. (previously presented) Form-fill-seal machine according to claim 12, wherein two second protrusions are present, which extend on either side of the vertical plane of section and preferably keep an area free between them, in which area a fold-maker is able to extend, wherein the two second protrusions preferably are connected to each other by a plate, for instance a V-shaped plate, which is forming a cavity for the inwardly folded bottom area to be made.

15. (previously presented) Form-fill-seal machine according to claim 1, wherein the fill tube has a substantially rectangular cross-section, having the main sides substantially parallel to the vertical main plane of section.

16. (original) Form-fill-seal machine according to claim 15, wherein the first side of the form and fill tube is bent having a flat surface between bent transitions to the main sides.

17. (original) Form-fill-seal machine according to claim 1, furthermore provided with means for arranging a strip of doublesided adhesive tape on the web of foil material in the area of the intended overlap.

18. (original) Form-fill-seal machine according to claim 17, wherein the first longitudinal sealing means are positioned for arranging the severable longitudinal seal at the side of the strip of doublesided adhesive that faces away from the outer longitudinal edge of the overlap.

19. (currently amended) Form-fill-seal machine for making bag-shaped packagings for products from a web of foil material, the machine comprising:

a frame having a stock of web of foil material and a supply of the web of foil material in flat condition;

a form-fill unit removably connected to the frame at a front side of the machine, said form-fill unit comprises a form shoulder for transforming the flat web of foil material into a foil tube, a form-fill tube connecting to the form shoulder, having a vertical main plane of section, and transportation means at a lateral side of the form-fill tube, said form-fill tube extending through the form shoulder in a vertical passage of the form shoulder, a collar surface of the form shoulder slopes with an inclined surface into a narrowing lip, said narrowing lip extends to a short side of said passage;

transverse sealing jaws that are positioned below a lower end of the form-fill tube for forming transverse seals in the foil tube and which are moveable towards and away from each other in a vertical plane perpendicular to a front side of the machine and said vertical main plane of section, the form shoulder

being asymmetrically shaped and having a sideward opening to form a flap in a packaging formed by the form-fill machine, said flap being formed from an overlap in the foil tube which extends from a front side of the form-fill tube to a first lateral side; and

first longitudinal sealing means positioned near said first lateral side, at one lateral side of the form tube, as considered from the front side of the machine, for forming a first, severable longitudinal seal at the location of the overlap while maintaining said flap.

20. (original) Form-fill-seal machine according to claim 19, wherein the overlap ends at the first side at at least a short distance from or near the said vertical plane of section.

21. (previously presented) Form-fill-seal machine according to claim 20, wherein the first longitudinal sealing means are positioned at a short distance from or near the said vertical main plane of section.

22. (currently amended) Form-fill-seal machine for making bag-shaped packagings for products from a web of foil material, the machine comprising:

a frame having a stock of web of foil material and a supply of the web of foil material in flat condition;

a form-fill unit removably connected to the frame, the form-fill unit comprising an asymmetrical form shoulder having a sideward opening that transforms the flat web of foil material into a foil tube, while forming an overlap that functions as a

flap, and a form-fill tube connecting to the form shoulder, said form-fill tube has a substantially rectangular cross-section and is positioned in the machine having a first main side facing away from the machine and a second main side facing the machine, said form-fill tube extending through the form shoulder in a vertical passage of the form shoulder, a collar surface of the form shoulder slopes with an inclined surface into a narrowing lip, said narrowing lip extends to a short side of said passage,

wherein the form shoulder forms the overlap at at least the first or second main side,

wherein the form-fill unit at a first short side of the form-fill tube is provided with two protruding form strips for forming longitudinal folds in the foil tube,

wherein the form-fill unit is furthermore provided with first longitudinal sealing means for forming a first, severable longitudinal seal in the area of the overlap while maintaining said flap, and with second longitudinal sealing means for forming second longitudinal seals at the location of the longitudinal folds,

wherein the form-fill-seal machine is furthermore provided with means for applying a strip of doublesided adhesive tape on the web of foil material in the area of the intended overlap,

wherein the form-fill-seal machine is furthermore provided with transverse sealing means positioned below the fill-

form unit for forming transverse seals in the foil tube and with means for severing said transverse seals at the location of the transverse seals.

23. (original) Form-fill-seal machine according to claim 22, wherein the means for arranging the severable seal are positioned for arranging the severable seal at the side of the strip of doublesided adhesive facing away from the outer longitudinal edge of the overlap.

24. (original) Form-fill-seal machine according to claim 22, wherein the second longitudinal sealing means are positioned at the second short side of the form-fill tube.

25. (original) Form-fill-seal machine according to claim 22, wherein the first short side of the form-fill tube is bent having a flat surface between bent transitions to the main sides.

26. (original) Form-fill-seal machine according to claim 22, wherein the form-fill unit is detachably arranged on the frame.

27. (original) Form-fill-seal machine according to claim 22, wherein the first longitudinal sealing means and/or the second longitudinal sealing means are detachably arranged on the frame.

28-48. (canceled)

49. (original) Form-fill-seal machine according to claim 1, designed as a continuously operative machine.

50. (original) Form-fill-seal machine according to claim 1, designed as a step-wise or discontinuously operative machine.